

Flight Scientist Report  
Saturday 02/26/2022 ACTIVATE RF129

Flight Type: Statistical Survey Flight (Refueling Day at Providence, RI)

Flight Route: KPVD SKOWL YAHOO LACKS ZIBUT ATLIC KLFI

Special Notes: Second of two flights with this one going back to Langley from Providence

### **King Air**

Pilot report (Wusk):

(0.3 hrs) Second flight of the day, planned research flight with the HU 25 for return to Langley. HU took off first after refueling stop in KPVD. On take-off fuel was seen streaming from near the right main fuel tank cap. The aircrew assessed the situation and requested an immediate return to KPVD. An uneventful (but overweight landing) was made at KPVD and taxi back to the FBO. After a ground assessment it was found that the fuel cap had been incorrectly installed. Though visibly level and flush the cap was pinching an internal restraining cable, which allowed a leak path and a subsequent substantial leak once subjected to airflow. After further visual inspection by the aircrew and consultation with RSD personnel back at LaRC, the crew was eventually cleared to fly the aircraft home directly to Langley .

(2.1 hrs) Return flight to Langley after fuel leak aborted flight from KPVD. Research power was enabled although a non-research path was flown home and was HU25 had already returned. Route was KPVD JUMPR SHLEP V139 to KLFI.

Flight scientist report (Shingler):

This was a direct/transit flight along the coast from KPVD back to KLFI due to an aircraft issue. We transited at FL140 so the HSRL2 remained off and sondes were not dropped. RSP was opened for the flight.

### **Falcon**

Pilot report (Baxley):

HU-25 coordinated flight with UC-12; Elder/Thorson, Crosbie/Winstead KPVD SKOWL YAHOO LACKS ZIBUT ATLIC KLFI Weather as expected, mission flown as briefed by HU-25 (UC-12 returned to KPVD for aircraft issue), no issues noted.

Flight scientist report (Crosbie):

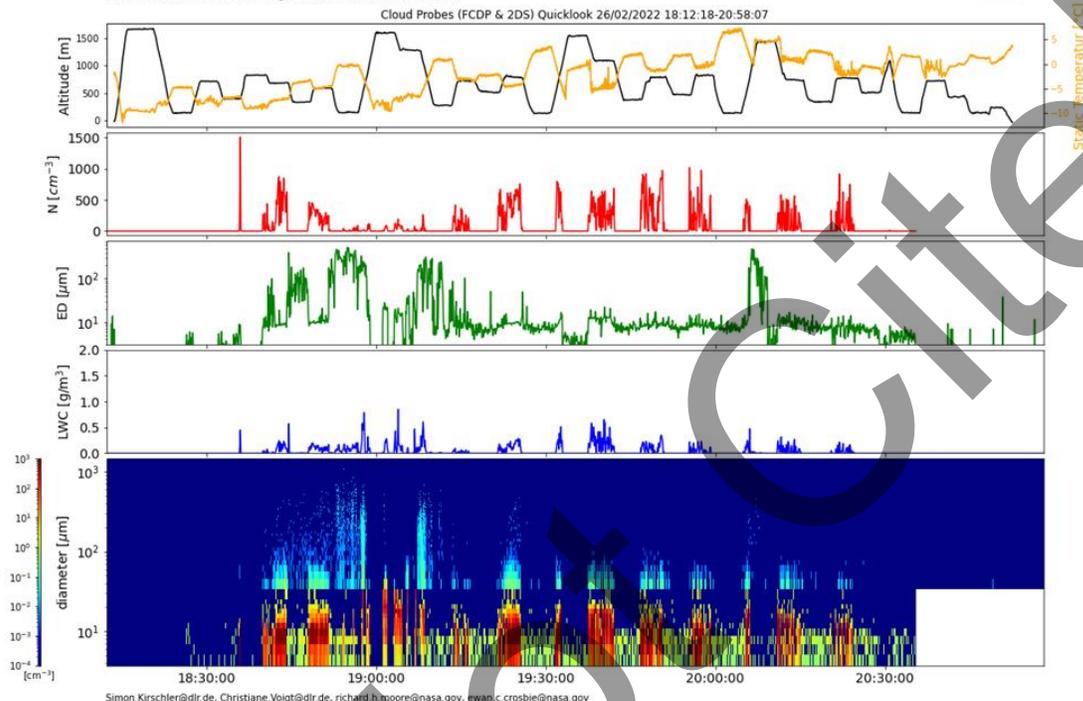
Stat survey return from PVD. Similar conditions were observed to the outbound leg. Flight was executed at a speed faster than max range since we were no longer attempting to coordinate with the KingAir

Do Not Cite!

# Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

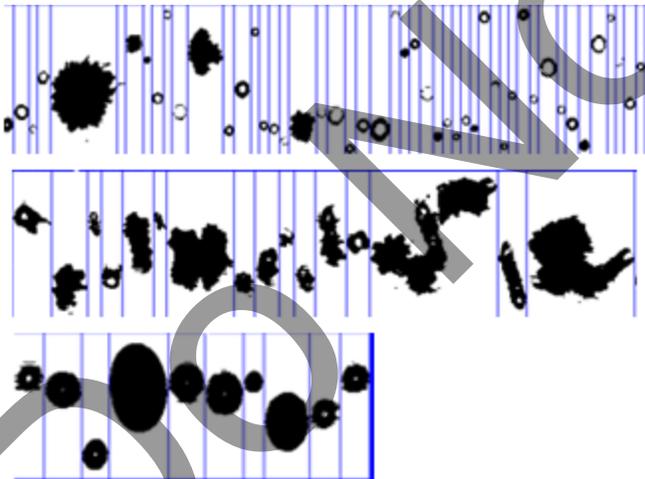
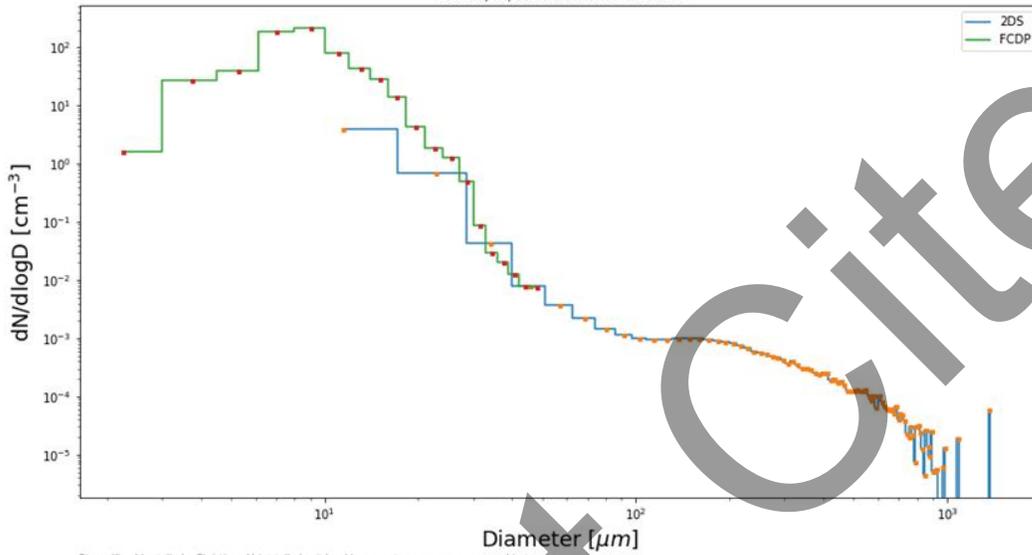


# PSD ACTIVATE

preliminary data, only for quicklook use  
Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

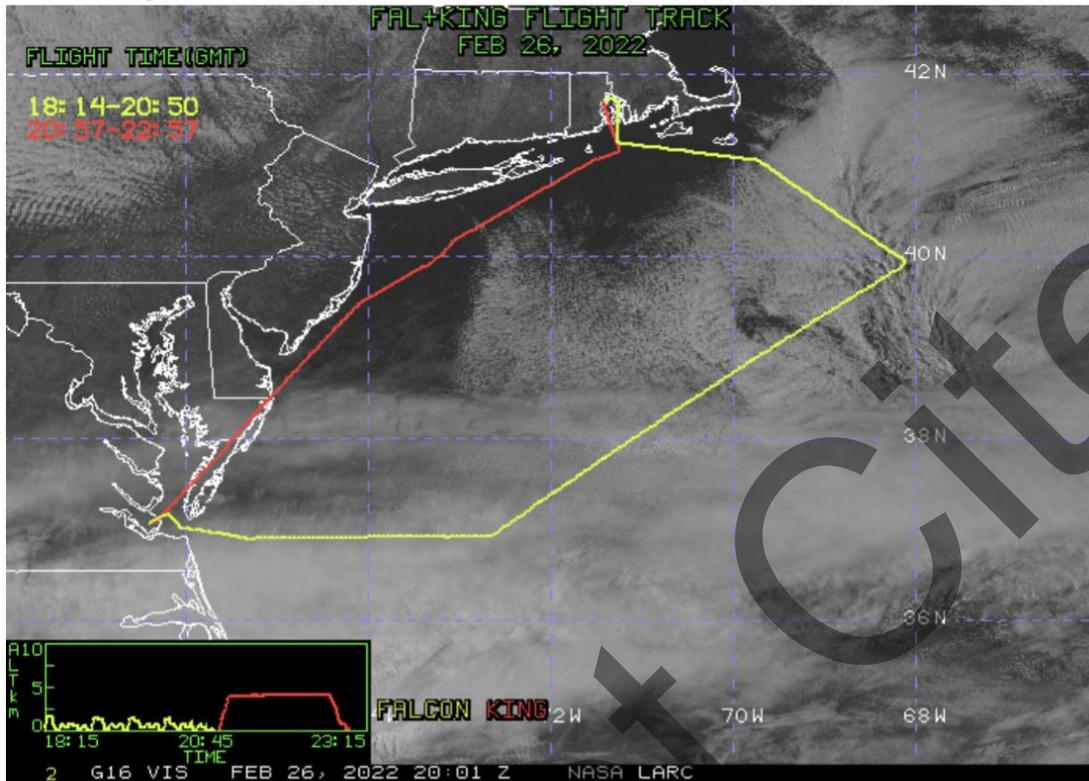


PSD 26/02/2022 18:12:18-20:58:07

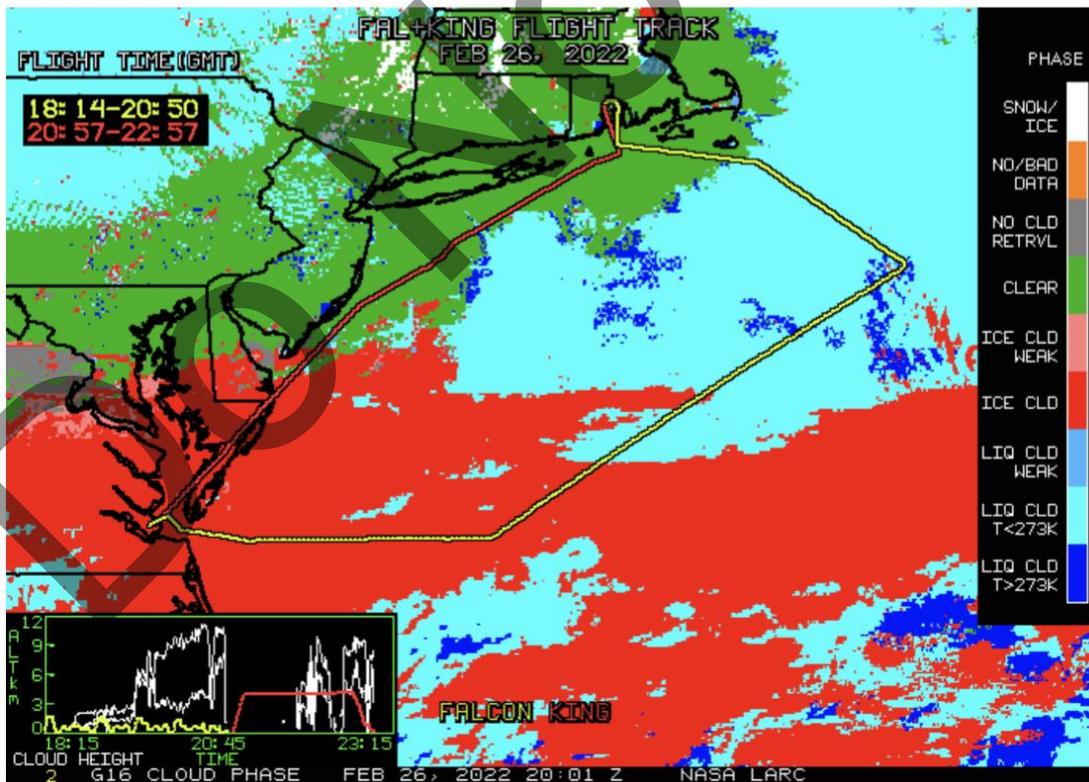


Mixed phase clouds with ice and liquid  
Precip.

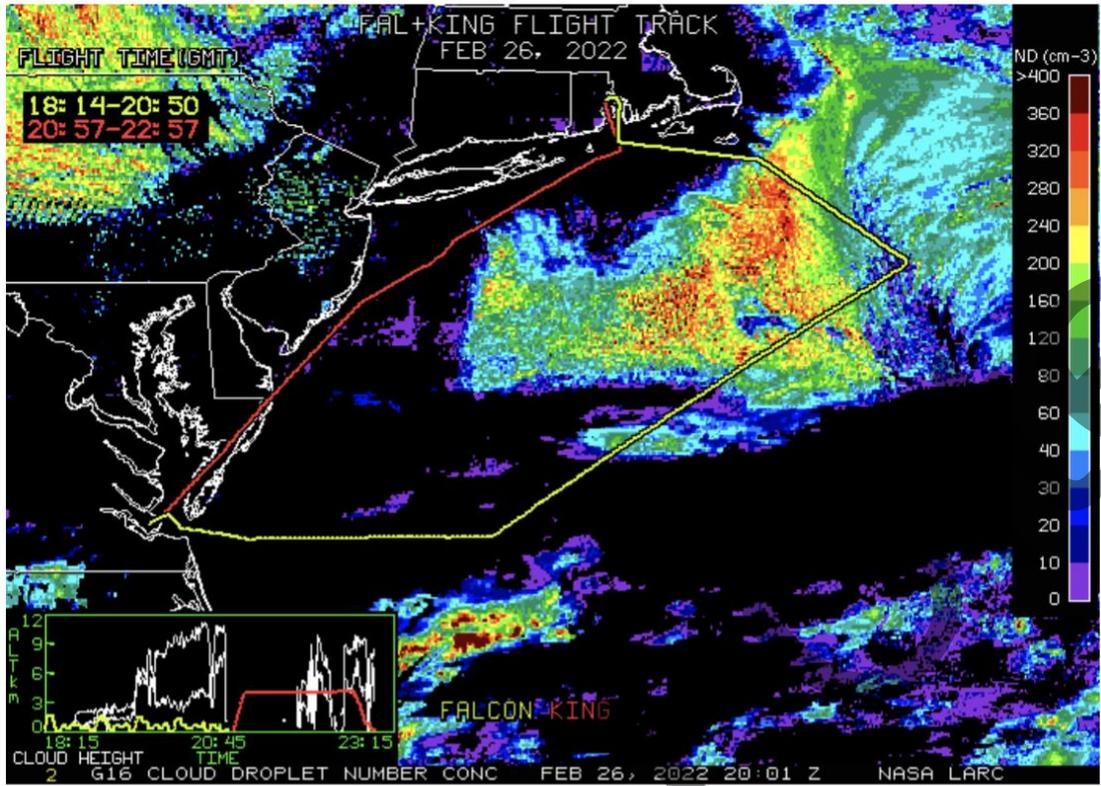
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 129, 20:01 UTC Feb 26, 2022  
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

